

## CLAIMS

1. An object collaboration apparatus operated in accordance with a message/action reaction relationship, comprising:

5           a message receiving part for allowing each object to monitor and capture a message transmitted on a network;  
          a message/action reaction relationship storing part for storing contents of an action that is a reaction to the message; and  
          an action executing part for executing processing in accordance with  
10   the contents of an action,

          wherein the apparatus further comprises a message type classifying/matching part, the message type classifying/matching part stores and holds a message type dealt with by the message/action reaction relationship storing part, analyzes a message type of a received message,  
15   conducts matching processing for determining whether or not a type of the received message is matched with the message type dealt with by the message/action reaction relationship storing part, and if matched, gives the received message to the message/action reaction relationship storing part, and  
          an action is executed in accordance with the message/action reaction  
20   relationship based on the message given to the message/action reaction relationship storing part.

2. An object collaboration apparatus according to claim 1, wherein classification of the message type has a hierarchy, and a message type header  
25   representing the message type contains information representing the hierarchy of the classification of the message type, and

          by applying the hierarchy of the classification of the message type, the message type classifying/matching part stores and holds a message type dealt with by the message/action reaction relationship storing part, analyzes a  
30   message type of the received message, and conducts matching of the message type.

3. An object collaboration apparatus according to claim 2, wherein the message type is defined by using an idea of inheritance in object-oriented programming, and the hierarchy of the classification of the message type contains a hierarchy of classification of a class derivation message type and a class derivation origin message type.

4. An object collaboration apparatus operated in accordance with a message/action reaction relationship, comprising:

a message receiving part for allowing each object to monitor and capture a message transmitted on a network;  
a message/action reaction relationship storing part for storing contents of an action that is a reaction to the message; and  
an action executing part for executing processing in accordance with the contents of an action,

wherein the apparatus further includes an entity name rewrite object for, with respect to a message received from one object entity, rewriting object entity name information in a message representing the one object entity to another object entity name information representing another object entity, and returning the message to the network.

5. An object collaboration apparatus according to claim 4, wherein for synchronization processing between objects, action contents desired to be subjected to the synchronization processing are described by using the object entity name to be an entity name rewrite target by the entity name rewrite object, in the message/action reaction relationship storing part of an object to be a slave, and

the entity name rewrite object rewrites the object entity name written as the entity name rewrite target into an object entity name to be a master object of the synchronization processing.

6. A computer-readable recording medium storing a processing program for realizing an object collaboration apparatus operated in accordance with a

message/action reaction relationship, the program comprising:

a message receiving processing operation of allowing each object to monitor and capture a message transmitted on a network;

a message/action reaction relationship storing processing operation of

5 storing contents of an action that is a reaction to the message;

an action executing processing operation of executing processing in accordance with the contents of an action;

a processing operation of storing and holding a message type dealt with in the message/action reaction relationship storing processing operation;

10 a processing operation of analyzing a message type of a received message;

a processing operation of conducting matching processing for determining whether or not a type of the received message is matched with the message type dealt with by the message/action reaction relationship

15 storing part; and

a processing operation of giving the message to the message/action reaction relationship storing part only in a case where the type of the received message is matched,

20 wherein only for a message whose type is matched, an action is executed in accordance with a message/action reaction relationship.

7. A computer-readable recording medium storing a processing program for realizing an object collaboration apparatus for rewriting an entity name of a message transmitted by one object to an entity name of another object,  
25 operated in accordance with a message/action reaction relationship, the program comprising:

a message receiving processing operation of allowing each object to monitor and capture a message transmitted on a network;

a message/action reaction relationship storing processing operation of

30 storing contents of an action that is a reaction to the message;

an action executing processing operation of executing processing in accordance with the contents of an action; and

an entity name rewrite processing operation of, with respect to a message received from one object entity, rewriting object entity name information in a message representing the one object entity to another object entity name information representing another object entity, and returning the

5 message to the network.